

Choice of accelerating

S/O20/61/141/004, 011, 014
B103/B101

will remain invisible at a given accelerating voltage owing to an insufficient contrast (Fig. 1). The MCC were calculated for substances consisting of carbon atoms with densities of $\rho = 1 \text{ g/cm}^3$ (curve 1) and $\rho = 2 \text{ g/cm}^3$ (2) on the supposition that the object to be examined is thin enough and that the electrons passing this object are scattered but once. The calculation was made for $\alpha_{\text{lim}} = 5 \cdot 10^{-3}$ radian. The cross sections of the scattered electrons determining the contrast of the image are very close to each other for carbon, oxygen, and nitrogen so that the calculated curves can be used for estimating the Δd_{min} of many biological objects. The experimental values of G. Lippert (IV International Congress on Electron Microscopy 1958, 1960, p. 288) are marked by circles in Fig. 1. It has been found that particles of less than 500 Å thickness are not visible when the accelerating voltage exceeds 200 kv. The chromatic effect which is usually neglected is due to the loss of electron energy in the substance. The blurred ring resulting from chromatic aberration is, however, greater than the limit resolving power of the apparatus (10 Å) and depends on both the accelerating voltage and the thickness of the object. When living objects are examined in a gas chamber, the electrons are scattered from the two protective films of the chamber, from the gas layer and from Card 2/5.

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B103/B101

the living cell. In this case, the effect of the chromatic defect is important because of the losses ΔU in electron energy in the substance (curves 3 - 5). It is evident from the figure that the image quality deteriorates on reduction of the accelerating voltage owing to the increasing chromatic defect. Owing to the chromatic defect the examination of a particle of less than 100 Å is even made impossible, although the contrast of the image of 10 Å particles (20 kv) would be sufficient in itself. When the accelerating voltage is increased, the chromatic defect decreases rapidly and does not prevent the examination of small particles; but now, these are invisible owing to the insufficient contrast. Thus, beginning from a certain value of the accelerating voltage which is established for a given thickness, the image quality is limited no longer by the parameters of the electron optical system but by the properties of the object. For biological objects with densities between $\rho = 1 \text{ g/cm}^3$ and $\rho = 2 \text{ g/cm}^3$ an optimum range of accelerating voltage (50 - 60 kv) exists, in which objects of up to 50 Å should be examined. Also an improvement in the quality of the objectives can contribute to reduce the optimum values of the accelerating voltages. Curve 6 shows that an increase of the accelerating voltages beyond 200 does not offer remarkable advantages.

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S, 020/61, 141, 004 017, 017
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since the irradiation damage is not reduced. Microorganisms can be examined in an electron microscope with a resolving power of 70 Å, if various protective measures are applied; they remain viable after a single exposure to an accelerating voltage of 70 kv. The increase of the accelerating voltage up to and beyond 200 kv in order to reduce irradiation damage is only useful, if a method of contrast accentuation is available which has no deterioration effect on the cell life and visualizes the structural details of a 20 - 50 Å object. In M. Kushnir is thanked for taking an interest. There are 1 figure and 4 references: 6 Soviet and 3 non-Soviet.

PRESENTED: June 10, 1961, by A. A. Lebedev, Academician

SUBMITTED: June 14, 1961

Card 4/5

15887

S/181/62/004/004/031/042
F102/B104

14 0510

17 04 00

ATTN: 181: Vyatskin, A. Ya., and Bilyankevich, A. N.

181: 181: Some laws of electron passage through solids

181: 181: Fizika tverdogo tela, v. 4, no. 4, 1962, 1142-1145

TEXT: The attempts hitherto made to obtain general laws from experiments of electron penetration into solids have not given satisfactory results. Therefore, the authors have tried to find semi-empirical laws which should be as general as possible. The theory is based on the combination of empirical integral characteristics and quantities describing the elementary processes. The electron deceleration in the solid is described by a power function of the type $A = CE_0^B$, where X is the maximum path length, E_0 the initial energy, and $n = n(\bar{t}, B, C, E_0)$; $B = 2\pi e^4 ZN$, $\bar{t}$ mean transferred energy, N - atomic concentration, ZN - effective number of electrons per cm^2 . The integral characteristics of the electron transition through a solid film of the thickness x are given by

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101, 02/004/004/C31/C42
B1, 2/R1, 4

Some laws of electron passage...

$$\tau = \int_{-1}^{+1} E(x, E_0, \theta) d\theta = \tau(x, E_0);$$

(9)

$$r = \int_{-1}^{+1} R(x, E_0, \theta) d\theta = r(x, E_0);$$

$$\tau = \int_{-1}^{+1} T(x, E_0, \theta) d\theta = \tau(x, E_0);$$

(10)

the relative number of passed electrons is $\tau = \tau(x, E_0, \theta)$, the reflection coefficient is $R = R(x, E_0, \theta)$, and the relative absorption is $\tau = \tau(x, E_0, \theta)$ for normal incidence; θ is the scattering angle and θ the

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S/181/62/004/004/031/042
B102 B104

Some laws of electron transport...

reflection angle. The electron absorption and the spread of the transverse paths is given by $-1/\partial x = \partial(\gamma+r)/\partial x$; in Ref. 6 (PTI, 2, 487, 1960) the respective characteristic was given by $\partial\gamma/\partial x = -\partial r/\partial x$. The mean paths $\bar{x}$ and the relative currents $i = \exp(-ax^p)$ are determined for Cu, Ge, Si, Al ($p=2$), and Pt, Bi ($p=1$);

$$1) p=1 \quad x = \frac{1}{a} \int_0^{\infty} x e^{-ax} dx = \frac{1}{a}; \quad (17a)$$

$$2) p=2 \quad x = \frac{1}{2a} \int_0^{\infty} x^2 e^{-ax^2} dx = \frac{1}{2} \left(\frac{\pi}{a} \right)^{1/2}; \quad (17b)$$

$$\gamma = \exp A \left[-\frac{1}{af_0^2} \right]; \quad p=1 \quad A=1; \quad (20)$$

$$p=2 \quad A=\frac{\pi}{4}.$$

are obtained. Finally, Selinger's method (Phys. Rev. 100, 1029, 1955) of "normalization" of the functions $\gamma(x)_{E_0}$ and $\eta(E_0)_x$ is discussed. It is

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B102, B104

Some laws of electron passage...

shown that in the first case normalization is possible if the p 's of all curves are equal, in the second one, if all m 's are equal ($m=n-1$).

ASSOCIATION: Leningradskiy institut tekhnologii mekhaniki i optiki
(Leningrad Institute of Precision Mechanics and Optics)

SUBMITTED: January 2, 1962

Card 4/4

PILYANKEVICH, A.N.

Formula for the cross sections of elastic electron scattering.
Zhur. tekh. fiz. 33 no.10:1260-1264 O '63. (MIRA 16:11)

1. Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR,
Kiyev.

S/070/62/007/004/002/010
E032/E414

AUTHOR: Pilyankevich, A.N.

TITLE: Calculation of incoherent X-ray scattering functions.
I. O, O⁺, Na, Na⁺, N, N⁻

PERIODICAL: Kristallografiya, v.7, no.4, 1962, 537-542

TEXT: The incoherent X-ray scattering functions were computed and are given in tabulated form for the above atoms and ions using the full Waller-Hartree theory (Proc. Roy. Soc. A124, 119, 1929), which takes into account exchange effects. Use is made of the wave functions for the self-consistent Fok-Hartree field. The calculations were carried out with the "Kiyev" computer of the Vychislitel'nyy tsentr AN UkrSSR (Computational Centre AS UkrSSR). The input data were in the form of tables of the radial components of the wave functions. The spherical Bessel functions which are necessary to the computation were computed by means of a special sub-program. Full numerical results are reproduced. There are 6 tables.

ASSOCIATION: Institut metallokeramiki i spetsial'nykh splavov
AN UkrSSR (Institute of Metal Ceramics and Special
SUBMITTED: September 25, 1961 Alloys AS UkrSSR)
Card 1/1

ANDRIEVSKI, R.A. [Andriyevskiy, R.A.]; HOLEAVENKO, K.H. [Holeyavenko, K. H.].
PILEANKEVICI, A.N. [Pilyankevich, A.N.]

Specific surfaces of metallic powders studies comparatively,
and by various methods. Analele metalurgie 16 no.2:137-141
Ap-Je '62.

L 39446-65 EPA(w)-2/EWT(1)/ZEC(t)/EWA(m)-2 P1-4/Pz-6 IJP(c) AT

ACCESSION NR: AP5006049

8/0139/65/000/001/0036/0038

AUTHOR: Vyatskin, A. Ya.; Pilyankovich, A. N.

TITLE: Dependence of the cross section for the inelastic scattering of electrons in metals on the atomic number

SOURCE: IVUZ. Fizika, no. 1, 1965, 36-38

TOPIC TAGS: electron scattering, inelastic scattering, metal lattice, Coulomb interaction

ABSTRACT: This is a continuation of earlier work by one of the authors (Vyatskin, ZhTF v. 28, 2217 and 2455, 1958; PTM v. 4, 555, 1962) dealing with inelastic scattering of nonrelativistic electrons by the lattice electrons in metals. The present article is devoted to the dependence of the average cross sections of the interband n-transitions (obeying the selection rule for the quasimomentum with participation of the reciprocal lattice vector $n/2\pi$), on the atomic number of the metal. For average metals, approximating the atomic electron-scattering amplitude either with the aid of the Thomas-Fermi model or with the aid of the Thomas-Fermi-

Card 1/2

L 3944645

ACCESSION NO: AP5006049

Dirac model, the expression obtained for the average cross section is $\sigma_D \approx 10^{-19} Z^{2b}$ (cm^2) where $2b = 1.3$ or 1.0 for the Thomas-Fermi and Thomas-Fermi-Dirac models, respectively. Since the cross section for inelastic scattering of electrons by isolated atoms is $\sigma \approx 10^{-19} Z^k$, where $k \approx 1$, the results of the present work lead to a conclusion, which is not obvious at first glance, that the cross section for the inelastic scattering of electrons by weakly bound electrons in a lattice and by isolated atoms exhibit approximately the same dependence on the atomic number, and are of approximately the same order of magnitude. It is also concluded that the interaction with the weakly bound electrons of the lattice is decisive, and interaction with the ionic core is usually small. Orig. art. has: 7 formulas and 2 tables.

ASSOCIATION: Leningradskiy institut tochnoy mekhaniki i optiki (Leningrad Institute of Precision Mechanics and Optics)

SUBMITTED: 10Jun63

ENCL: 00

SUB CODE: NF, SS

NR REF SOV: 005

OTHER: 002

Card 12/27/63

ACC NR: 198015765

three sharply distinguished regions were discerned: a central region consisting of axial grains, an intermediate region with 10 Å regular or dendritic structure, and a peripheral region in which the film retained its initial structure. The zone structure is ascribed to the action of temperature gradients arising in the film under electron bombardment as a result of the high heat conductivity of the wires of the supporting grid. When the films were heated directly in the microscope there were no large temperature gradients and the anneal led to the appearance of fine equiaxed crystals which grew by recrystallization. The electron diffraction patterns of the crystallized films showed, in addition to many lines of the diamond-type lattice of germanium and silicon, a number of lines associated with the face-centered cubic lattice and forbidden for the diamond-type lattice by the structure factors. It is suggested that these forbidden lines may be due to multiple diffraction. Orig. art. has: 3 figures.

SUB CODE: 20/

SUBM DATE: 00/

ORIG REF: 000/

OTH REF: 004

Cord 2/2 /

ВЯЧЕН, А.В. и МЯКОВ, А.Н.

[illegible]

... only Mehkar ...

MAKAROVA, R. V.; PILYANKEVICH, A. N.; FEDOROVICH, O. K.; FRANTSEVICH, I. N.

"Vorgänge beim Sintern mit Flüssigkeitsphase in den Systemen W-Ni-P und W-Ni-P-Cu."

report submitted for Int. Conf. on Powder Metallurgy, Moscow, U.S.S.R.,
1961 May 12.

Kiev, U.S.S.R.

1. The first part of the document is a letter from the

Director of the Central Intelligence Agency to the

President of the United States, dated 11/11/61.

ACCESSION NR: AP4034953

S/0101/64/006/005/1563/1565

AUTHORS: Vyatskin, A. Ya.; Pilyankevich, A. N.; Trunov, V. V.

TITLE: Transmission of electrons through solids

SOURCE: Fizika tverdogo tela, v. 6, no. 5, 1964, 1563-1565

TOPIC TAGS: electron, metal film, thin film, electron reflection, aluminum, copper, gold

ABSTRACT: The transmission of electrons through thin metallic films was investigated experimentally. On the basis of the new data an empirical formula for the relative integrated transmission coefficient (the ratio of the current passing through the film and the incident current I_0) can be written in the more general form: $\eta = \exp[-a(E_0, Z)x^{1/2}]$. Here x is the thickness of the film, Z is the atomic number of the film material, and E_0 is the energy of the incident electrons. The range of sample thicknesses was from 500 to 40 000 Å and was determined to within 9%. Incident electron energies were used in the range 4 keV $< E_0 < 30$ keV and $(I_0 \approx 5 \cdot 10^{-7} \text{ A})$. Experimental values for p were obtained: Al - 1.9; Cu - 1.7; Au - 1.3

Cord 1/2

ACCESSION NR: AP4034953

Orig. art. has: 7 equations and 1 table.

ASSOCIATION: Leningradskiy institut tochnoy mekhaniki i optiki (Leningrad Institute of Precision Mechanics and Optics)

SUBMITTED: 09Dec63

DATE ACQ: 20May64

ENCL: 00

SUB CODE: SS,MM

NO REF SOV: 003

OTHER: 001

Card 2/2

VYATSKIN, A.Ya.; PILYANKEVICH, A.N.

Some energy characteristics of the passage of electrons through
solids. Fiz. tver. tela 5 no.8:2285-2293 Ag '63. (MIRA 16:4)

1. Leningradskiy institut tochnoy mekhaniki i optiki.
(Electron beams)

PILYANKEVICH, A.N.

Dependence of contrast in an electron-microscopic image on the
accelerating voltage. Izv. AN SSSR. Ser. fiz. 27 no. 2:1142-1150
S '63. (MIRA 16:2)

1. Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR.
(Electron microscope)

PILYANKEVICH, A.N.

Effect of spherical aberration of the objective lens on contrast
in images of extended objects. Izv. AN SSSR. Ser. fiz. 27 no. 2:
1147-1148 S '63. (MIRA 16:2)

1. Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR.
(Electron microscope)

"APPROVED FOR RELEASE: 06/15/2000

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APPROVED FOR RELEASE: 06/15/2000

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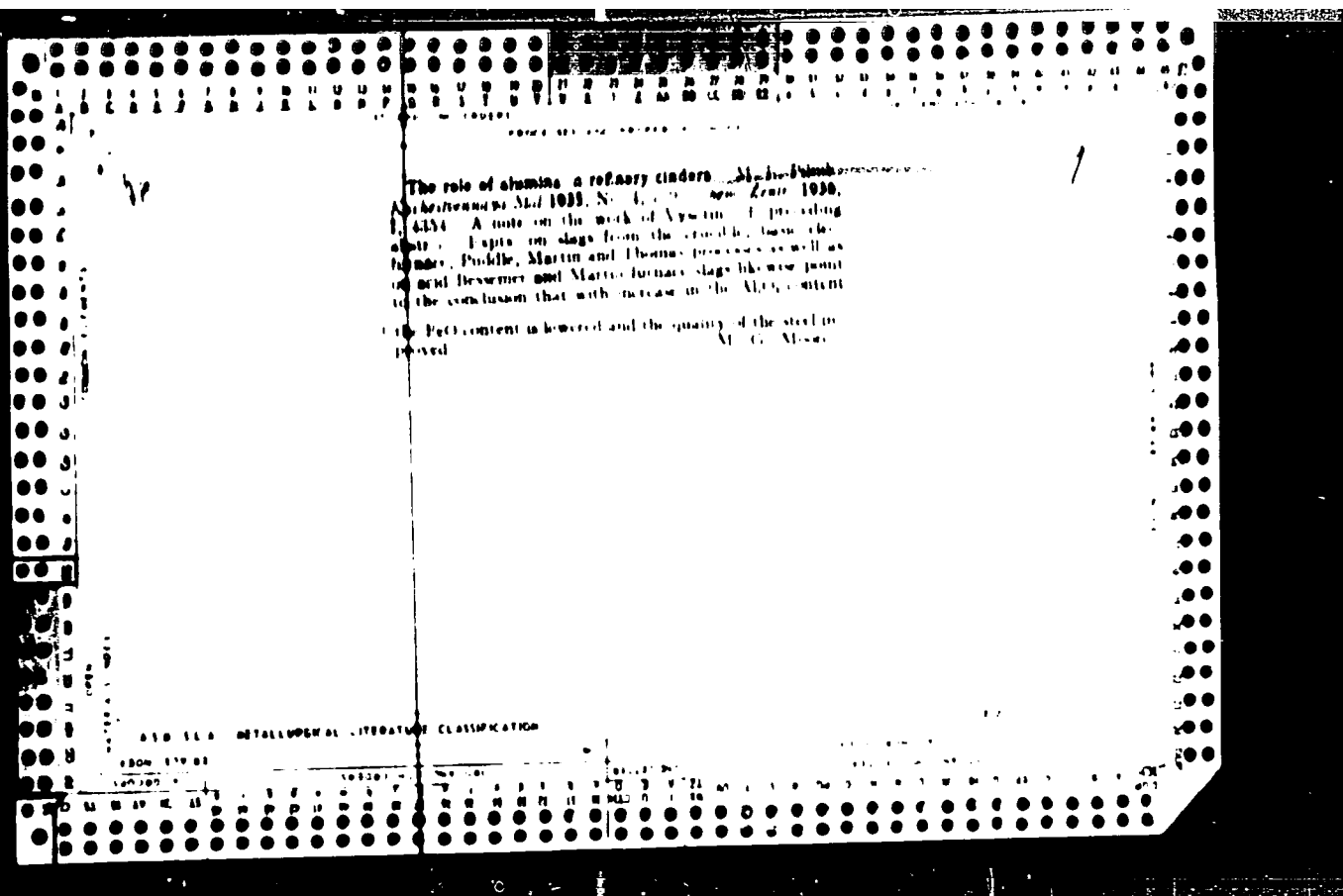
CA

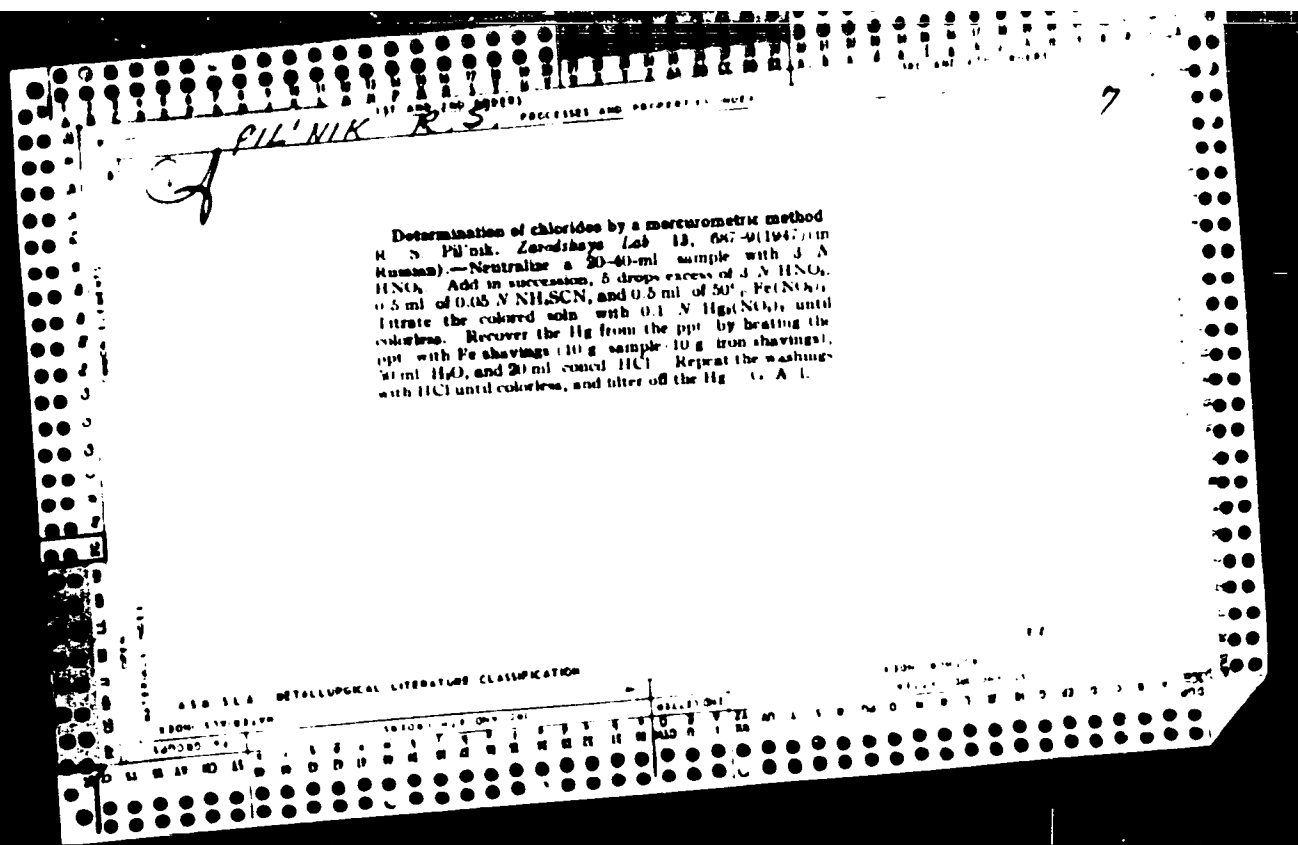
9

The influence of chromium slags on the process of sulfur removal from Martin furnaces M. M. Pshnik, Novot

U.S. & S. S. 1951, *U.S. & S. S. 1951*, 11, 1, 1. As a result of marked foam formation and slight activity of the slag, slags contain during the melting process an increased content of oxides of the type R_2O , oxides of the type RO , and a reduced content of lower oxides of the type RO . The reduced content of lower oxides in the slag makes possible the passing of the S into the slag according to the equations $MnS + CaO = CaS + MnO$ and $FeS + CaO = CaS + FeO$. The increased content of oxides of the type R_2O in the Cr-containing slag, on the other hand, as well as the reduced content of lower oxides makes possible the removal of the S in accordance with the reaction $CaS + 1/2 Fe_2O_3 = SO_2 + CaO + 1/2 Fe_2O_3$, the Cr_2O_3 of the slag reacting with the Fe_2O_3 to form the compound $FeCr_2O_4$, and thus forming a considerable amount of the Fe . The poor thermal conductivity of heavy Cr-containing slag and the dephasing of the surface make possible the endothermic reaction $FeS + 1/2 Fe_2O_3 = SO_2 + 1/2 Fe_2O_3$. (10) S. & S. 1951, 11, 1, 1.

The influence of chromium slags on the process of sulfur removal from Martin furnaces. M. A. Finkh. *Sov. Met.* 6, 1850 (1971). *Chem. Zvesti.* 1971, 11, 1571. As a result of marked foam formation and slight activity, Cr-containing slags during the melting process an increased content of oxides of the type R_2O_3 or complex $RO \cdot R_2O_3$ and a reduced content of lower oxides of the type RO . The reduced content of lower oxides in the slag makes possible the passing of the S into the slag according to the equations $MnS + CaO = CaS + MnO$ and $FeS + CaO = CaS + FeO$. The increased content of oxides of the type R_2O_3 in the Cr-containing slag, on the other hand, as well as the reduced content of lower oxides makes possible the removal of the S in accordance with the reaction $CaS + 3FeO = 3CaO + Fe_3S_2$. The Cr₂O₃ of the slag reacting with the FeO to form the complex $FeO \cdot Cr_2O_3$ and thus having a considerable part of the Fe. The poor thermal conduct of foamy Cr-containing slag and the overheating of the surface makes possible the endothermic reaction $FeS + CaO \cdot R_2O_3 = CaS + CaO \cdot FeO$. W. A. Mironov.





83694

S/076/60/034 1968
B014, B054

5 4700

AUTHORS

Piloyan, G. O., Yevseyev, A. M. and Gerasimov, (Moscow)

TITLE

Thermodynamic Properties of Alloys of the System Chromium
Tantalum

PERIODICAL:

Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 8,
pp. 1768-1772

TEXT: The authors determined the thermodynamic properties of chromium-tantalum alloys by measuring the pressure of chromium vapor with the use of the Knudsen effusion method. The measurements were made on eight samples at temperatures between 1228.5° and 1303.5°C; for calculating the activity of chromium, the authors measured vapor pressures at 1501.5° and 1576.5°K (Table 1), and therefrom determined the activity of chromium in the chromium-tantalum system (Table 2). They determined the integral formation heats and entropies of chromium-tantalum alloys by graphic integration from the Duhem-Margules equation (Table 3). The

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Thermodynamic Properties of Alloys of the
System Chromium - Tantalum

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B015/P064

results obtained suggest the presence of a solid solution up to 70 at. % of Cr on the chromium side, and of a heterogeneous region and a solid solution on the basis of $TaCr_2$. On the tantalum side there is apparently a solid solution of chromium in tantalum up to 30 atom% of chromium. The maximum partial formation heat corresponds to the composition of the stoichiometric interphase $TaCr_2$. O. Kubashevskiy, G. B. Bokiy and P. Vaynshteyn are mentioned in the paper. There are 3 figures, 1 table, and 8 references. 3 Soviet and 5 US.

ASSOCIATION. Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosova)

SUBMITTED. November 15, 1968

Card 2/2

... M.

Estimating the cost of raw material ready for processing Mias
ind. SSSR 25 no.6:47 '54.
(MIRA 2-1)

1. Nachal'nik planovogo otдела Chelyabinskogo myasotresta
(Meat industry)

MELIK-GAYKAZYAN, V.I.; BAYCHENKO, A.A.; ~~PILYASOV, P.I.~~ MOROZ, A.P.

A pulp meter. Koks i khim. no.6:12-13 '57. (MLRA 10:7)

1. Tomskiy politekhnicheskiy institut (for Melik-Gaykazyan, Baychenko). 2. Gorlovskiy koksokhimicheskiy zavod (for Pilyasov, Moroz). (Flotation)

MELIK-GAYKAZYAN, V.I.; BAYCHENKO, A.A.; PILYASOV, F.L.

Choosing an efficient defrothing arrangement for flotation separation
in a coal dressing plant. Koks i khim. no.1.12-15 '58. (MIRA 11:2)

1. Tomskiy politekhnicheskiy institut (for Melik-Gaykazyan, Bay-
chenko). 2. Gorlovskiy koksokhimicheskiy zavod (for Pilyasov).
(Coal preparation) (Flotation)

VOROB'YEV, D.D.; DARIYENKO, V.I.; PILYASOV, F.L.; TEACHENKO, N.A.

Experience in cleaning unclassified coal in a jigging machine of new design. Koks i khim. no.1:14-17 '60. (MIRA 13:6)

1. Gorlovskiy koksokhimicheskiy zavod.
(Coal preparation)

12-11-73
AUTHORS: Melnik-Lavrenko, V.I., Ponomarev, A.A., Polyakov, F.L., and
Mironov, A.P.

TITLE: Emulsification and Fine Feeding of Reagents Used in the Industrial
Flotation of Coal. (Emulsirovaniye i tonnyy podacha reagentov, ispol'zuyemykh pri promyshlennoy flotatsii uгля).

PERIODICAL: Khimiya Krayev, 1973, No. 1, pp. 12-13 (USSR)

ABSTRACT: Results of studies on the emulsification of the Slavka Cokes Oven
Waxes, a fine feed flotation with water emulsions of sulfurated
kerosene and air flotation, which were fed into the pulp of five
plants, i.e., in small quantities, as well as a description of the
emulsifying apparatus used are given. The scheme of flotation and
feeding reagents for the reagents are shown in figure 1 and the
emulsifying apparatus in figure 2. Experimental results of
flotation of coal fines with emulsified and non-emulsified reagents
are given in tables 1 (at 20° C) and 2 (at 7° C). With emulsified
reagents an improvement in the efficiency of flotation was obtained.
There are 2 tables, 2 figures and 1 reference, all of which are
Slavic.

Card 1/1

68-8-5/23

Emulsification and Fine Feeding of Reagents Used in the Industrial Flotation of Coal. (Emul'sirovaniye i drobnyaya podacha reagentov, ispol'zuyemykh pri promyshlennoy flotatsii uglya).

ASSOCIATIONS: Tomsk Polytechnical Institute (Tomskiy Politekhicheskiy Institut) and Gerlovka Coke Oven Works (Gerlovskiy Koksokhimicheskiy Zavod).

AVAILABLE: Library of Congress

10-1-1/11

AUTHORS: Melik-Gaykazyan, V.I., Baychenko, A.A., and Pilyayev, F.L.

TITLE: On the Problem of Choosing a Rational Scheme of Froth
Extinguishing for the Separation of Fine Coal
Coal Washeries (K vyboru vykhodivshikh na
penogasheniya dlya flotatsionnykh ustroystv pri obrabotke
PERIODICAL: Koks i Khimiya, 1958, No.1, pp. 12-15 (USSR).

ABSTRACT: Three types of de-frothing installations (mechanical,
gravitational and vacuo) used in Soviet coal washeries are
outlined and the capital costs of installation of the latter
two types of equipment (Figs. 1 and 2, respectively) are
compared. On the basis of this comparison, the application of
the vacuo scheme of froth extinguishing, not only in new, but
also in already operating washeries is recommended.
There are 3 figures, 1 table and 4 Slavic references.

ASSOCIATIONS: Tomsk Polytechnical Institute (Tomskiy politehnicheskii
institut)
Gorlovka Coke Oven Works (Gorlovskiy koksnyy zavod)

AVAILABLE: Library of Congress

10-1-1/11

68-6-1/10

AUTHOR: Melik-Gaykazyan, v.I., Baychenko, A.A., Pilyasov, r.L.,
and Moroz, A.P.

TITLE: A Pulpmeter (Pul'pomer)

PERIODICAL: Koks i Khimiya, 1957, No.6, pp. 12 - 13 (USSR)

ABSTRACT: A description of a continuous pulpmeter indicating the
throughput of pulp in m³/h, based on the indication of the
level of the pulp flowing through a narrow trough is given.
There are 1 figure and 2 Slavic references.

ASSOCIATION: Tomsk Polytechnical Institute (Tomskiy Politekhnich-
eskiy Institut)
Gorlovsk Coke Oven Works (Gorlovskiy Koksokhimicheskiy
Zavod)

AVAILABLE: Library of Congress

Card 1/1

Flotation of coal fines with the use of a water emulsion of kerosene. V. I. Melik-Galkisryan, A. A. Balchenko, P. I. Pilyasov, and M. B. Iofa (Polytech. Inst., Tbilisi). *Kobz. Khim.* 1956, No. 8, 19-20. Results of simple expts. on the flotation of fines (ash content is not stated) with the use of sulfonated kerosene (2.5 kg./ton of product) as reagent are reported. Ash contents of the product, with and without preemulsification of the water-kerosene with an injector working on the Venturi principle, are 8.1% and 9.24%, resp.

H. L. Olin

BUTOVETSKIY, V.S.; PILYASOV, F.L.

Introduction and practical use of polyacrylamide for the
flocculation of circulating water slurry. Koks i khim. no.2:3-8
'62. (MIRA 15:3)

1. UkrNIIUgleobogashcheniye (for Butovetskiy). 2. Serlovskiy
koksokhimicheskiy zavod (for Pilyasov).
(Coal preparation) (Acrylamide)

RYZHIKOV, V.; PITYATSKIN, B.

Living soul of a people. Sov.foto 13 no.10:73-76 0 '58.

(Japan--Photography)

(MIRA 11:11)

PILYAVSKIY, A.T.

Improving the use and repair of building machinery. Stroil.prom.
34 no.2:18-21 F '56. (MLRA 9:5)

1. Glavnyy mekhanik Minmetallurgkhimstroya.
(Building machinery--Maintenance and repair)

Phylogenetic

AUTHOR: D. J. ...
 TITLE: Determination of the structure of the ...
 PERIODICAL: Journal of ...

ABSTRACT: As it is known that the ...
 Card 1/2

Determination of the primary and secondary amine groups in the presence of the isomeric tertiary amines.

units like a primary amine. It was found that the primary and secondary amines react quantitatively with the isomeric tertiary amines, so that they can be determined by titration of the amine groups with the isomeric tertiary amines in the presence of the isomeric tertiary amines. The results of the titration of the primary and secondary amines with the isomeric tertiary amines in the presence of the isomeric tertiary amines are given in the table. It was found that the primary and secondary amines react quantitatively with the isomeric tertiary amines in the presence of the isomeric tertiary amines. There are 2 figures, 1 table, and 2 references, all of which are in Russian.

ASSOCIATION. Leningrad factory for optical animation (Leningradskiy zavod opticheskoy animatsii).

SUBMITTED. November 15, 1977.

AVAILABLE. Library of Congress.

Card 2/2 1. All, 1 chlorides-Determination

PILYAVSKAYA A.I.

LEETS, K.V.; PILYAVSKAYA, A.I.; KOROVKINA, M.I.

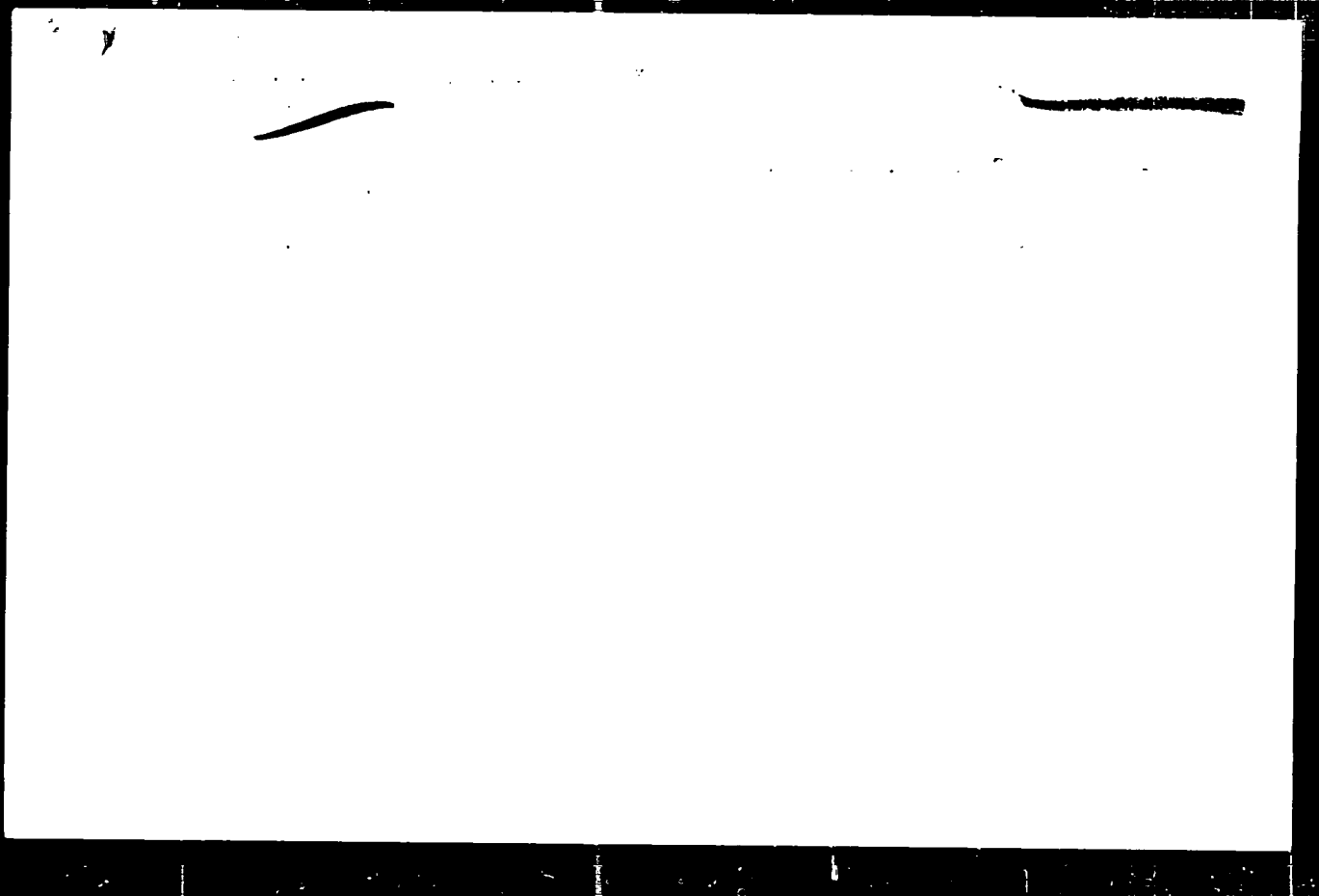
Determination of primary allyl chlorides in mixtures with isomeric tertiary chlorides. Zhur. ob. khim. 27 no.11:2969-2972 N '57.

(MIRA 11:3)

1. Leningradskiy zavod sinteticheskoy aromatiki.
(Chlorides) (Chemistry, Analytical)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001340910008-5



APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001340910008-5"

MAKAROV, A.K.; PILYAVSKAYA, A.Ye.

Materials on the biology of the Black Sea shrimp *Leander adspersus* Rathke.
Trudy Karad.biol.sta. no.11:92-109 '51. (Kara Sea)
(Black Sea—Shrimps) (Shrimps—Black Sea)

CA Pilyavskaya, R A

32

Natural emulsifiers of concentrated petroleum emulsions

V. G. Benkovskii and R. A. Pilyavskaya (Acad. Sci. Kazakh S.S.R. *Kolloid. Zhur.* 13: 401, 1951).

The emulsifiers present in the emulsions produced during pumping and transport in pipes of crude oil are isolated by gradual displacement of the oil by light gasoline and then by distilling the gasoline. All emulsifiers isolated from stable emulsions contain an inorg. and an org. part. The chem. compn. of the first was similar to that of the local rocks and the mean grain size was 10-100 μ . The 2nd consisted of resins, asphaltenes, resins, acids, organometal, and organosilicon compounds. The surface activity of the emulsifiers was small

and had no direct bearing on the emulsifying power. The asphaltenes were the best emulsifiers but less surface active than naphthenic acids which were poor emulsifiers. The crude oils of the Ural-Timba region contained 0.10-0.12% emulsifier. Ultimate chem. analysis, mean and st. dev. of the emulsifiers of 8 oil samples were detd. J. J. R.

EPSHTEYN, M.M.; PILYAVSKAYA, S.M. [Piliavs'ka, S.M.]

Effect of some essential oils on the dehydrogenase activity of
Paramecium. Mikrobiol.zhur. 24 no.2:44-48 '62. (MIRA 15:12)

1. Kiyevskiy meditsinskiy institut, kafedra biokhimii i kafedra
biologii.

(PARAMECIUM) (DEHYDROGENASE)
(ESSENCES AND ESSENTIAL OILS)

PILYAVSKIY, A.G.

Experience of leading excavator operators. Stroil.prom. 12
no.12:46-47 D'54. (MLRA 8:1)
(Excavation)

Pilyavskaya, A. I.

Distr: 4E4J/4720(J)

New synthesis of citral from isoprene. K. V. Lesta, A. I. Pilyavskaya, A. A. Kozlovskiy, N. V. Kuznetsova, and A. I. Pilyavskaya (Synthetic Perfumery Plant, Leningrad).
 Zashch. Khim. 27, 1510-12 (1957).
 dry HCl to 400 g. $\text{CH}_2=\text{C}(\text{Me})\text{CH}=\text{CH}_2$, followed by diln. with 787 g. CH_2Cl_2 and addn. with cooling of 1 g. SnCl_4 and after 3 min. 20 g. $\text{CO}(\text{NH}_2)_2$ gave, after filtration of pptd. telomers, 63 g. product which yielded 50.5 g. dry Me_2CO treated with 17 g. eutropein 3 days yielded 34 g. quaternary salt, $\text{C}_{10}\text{H}_{16}\text{NCl}$. This (30 g.) in 1.2 l. H_2O was treated with 20 g. 30% formalin, refluxed 0.5 hr., and steam-distd., yielding 10 g. citral, b. 65-70°, which was converted to anthracic pseudocoumarone and ionone. The Me_2CO soln. of residual chlorides after sepn. of the quaternary salt (above) was heated 2 hrs. with 10 g. eutropein, the pptd. crystals filtered off, the soln. evapd., the residual chloride hydrolyzed with aq. alc. $\text{Pb}(\text{NO}_3)_2$ and PbCO_3 3 hrs. at reflux, and the resulting alc. separated in the benzene by treatment with $(\text{BuLi})_2$, which after sepn. by distn. and hydrolysis gave 8 g. terpenyl alc. identified as di-terpinenol, m. 23.

O. M. Kozlovskiy

8
2 May

PILYAVSKIY, A.B., inzhener.

Operating the B-1004 excavator with the KDM-46 motor. Mekh.stroi.
11 no.9:24-25 S '54. (MLRA 7:9)
(Excavating machinery)

PILYAVSKIY, A.T.; SOKOLOV, D.V., inzhener, nauchnyy redaktor; PROSTOSER-
DOV, ~~D.V.~~, redaktor izdatel'stva; BOROVNEV, N.K., tekhnicheskiy
redaktor; MEL'NICHENKO, P.P., tekhnicheskiy redaktor

[Safety instructions for movable electric power plant operators]
Pamiatka po tekhnike bezopasnosti dlia mashinista peredvizhnol
elektrostantsii. Moskva, Gos. izd-vo lit-ry oo stroit. i arkhit.,
1956. 15 p. (MLRA 10:4)
(Electric engineering--Safety measures)

1. The first part of the document is a list of the names of the individuals who were involved in the project.

2. The second part of the document is a list of the names of the individuals who were involved in the project.

3. The third part of the document is a list of the names of the individuals who were involved in the project.

PILYAVSKIY

PHASE I BOOK EXPLOITATION

SOV/5100

Kablov, Ivan Aleksandrovich, Dmitriy Mikhaylovich Levykin, Grigoriy Semenovich
Pilyavskiy, and Ivan Pavlovich Prosyankin

Korpusnyye konstruksii iz alyuminiyevykh splavov (Aluminum-Alloy [Ship] Hull
Structures) Leningrad, Sudpromgiz, 1960. 151 p. 2,800 copies printed.

Scientific Ed.: P. A. Alsuf'yev; Ed.: A. I. Kuskova; Tech. Ed.: R. K. Tsai.

PURPOSE: This book is intended for technical personnel in the shipbuilding
industry and other branches of industry engaged in the construction of
aluminum-alloy structures.

COVERAGE: Experience gained in the construction of aluminum-alloy hull struc-
tures is discussed. Attention is given to the following: equipment and ac-
cessories used in the construction process, methods of preparing and processing
aluminum alloys, types of joints for structures made of steel and aluminum al-
loys, the assembly, welding, and riveting of the structures, methods of
protecting the structures against corrosion, and quality control. **NO**

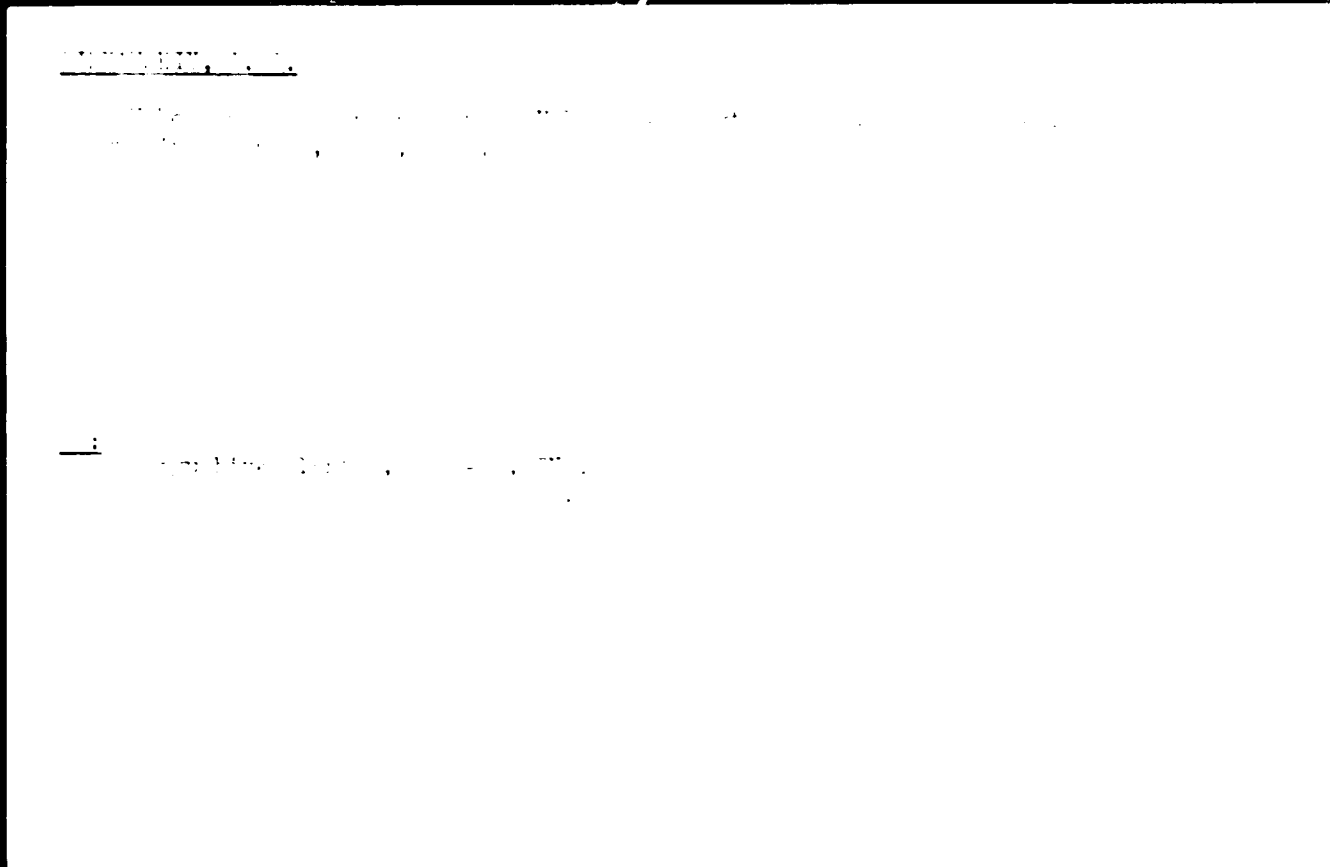
Card 1/6

SIDORENKO, Ivan Mikhaylovich; PITYAVSKIY, G.S., nauchnyy red.;
MISHKEVICH, G.I., red.; SHISHKOVA, L.M., tekhn.red.

[Production line for removing scale and rust from sheet
steel] Potochnaya liniya ochistki listovoi stali ot okaliny
i rzhavchiny. Leningrad, Gos.sciuznoe izd-vo sudostroita.
promyshl., 1960. 41 p. (MIRA 14:1)
(Metal cleaning)

KABLOV, Ivan Aleksandrovich; LEVYKIN, Dmitriy Mikhaylovich; Pilyavskiy, Grigoriy Semenovich; PROSYANKIN, Ivan Pavlovich; ALSUF'YEV, P.A., nauchnyy red.; KUSKOVA, A.I., red.; TSAL, R.K., tekhn.red.

[Hull constructions with use of aluminum alloys] Korpuanye konstruktsei iz aluminievykh splavov. Leningrad, Gos.soiuznoe izd-vo sudostroit.promyshl., 1960. 151 p. (MIRA 13:6)
(Shipbuilding--Supplies)



PILYAVSKIY, I.I.

vybor Raspolozheniya Shpurov V. Usloviyakh Opytnogo Gdevoskogo Rhdnika,
Goryuchiye Slantsy, 1935, No. 4, 53.

SO: Goryuchiye Slantsy, 1934, 35 TN. 871
G74

BARTENEV, Igor' Aleksandrovich, kand. arkhitektury; IKONNIKOV, A.V.,
kand. arkhitektury, red.; MEDERSKIY, L.A., starshiy nauchnyy
sotr., red.; PILYAVSKIY, V.I., doktor arkhitektury, nauchnyy
red.; VOROB'YEV, G.S., red.; GURDZHIYEVA, A.M., tekhn. red.

[Paris] Parizh. Leningrad, Ob-vo po rasprostraneniю polit. i
nauchn. znaniy RSFSR, 1962. 65 p. (MIRA 16:3)
(Paris--Description)

PIIYAL'NIY, V. I.

PIIYAL'NIY, V. I. Arhitektura i stroitel'stvo Leninskogo raiona.
Moskva, Izd. Akademii arkhitektury SSSR, 1946. 1. 1. (Doklady i soob-
sheniya.)
ID: Unclass.

C: LC, Soviet Geography, Part II, 1. 1. Unclassified

ILIASKE, Vladimir Ivanovich.

1. EC 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311 2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348 2349 2350 2351 2352 2353 2354 2355 2356 2357 2358 2359 2360 2361 2362 2363 2364 2365 2366 2367 2368 2369 2370 2371 2372 2373 2374 2375 2376 2377 23

PILYAYEV, V.

Leningrad Coke-Oven Gas Plant is 100 years old. Koks i khim. no.11;
61 '60. (MIRA 13:11)

(Leningrad--Coke industry)

AUTHOR: Pilyayev, V.

SOV/68-59-8-28/32

TITLE: On the Leningrad Coking Gas Works (Na Leningradskom
koksogazovom zavode)

PERIODICAL: Koks i khimiya, 1959, Nr 8, p 56 (USSR)

ABSTRACT: A number of improvements introduced on the works are
mentioned: automation of the central pumping station,
automation of gas producers operating on anthracite and
waste heat boilers.

Card 1/1

VOLOD'KO, I.Ye.; PILYAYEV, V.V.; NESTEROVA, Ye. V.

Coke by-products industry should furnish agriculture with herbicides.
Koks i khim. no.1:41-43 '62. (MIRA 1512)

- 1.Leningradskiy sel'skokhozyaystvennyy institut (for Volod'ko).
- 2.Leningradskiy koksogazovyy zavod (for Pilyayev).
(Coke industry—By-products)(Herbicides)

PILYAYEV, V.V.

One hundreith anniversary of the Leningrad Coke-Oven Gas Plant.
Koks i khim. no.12:3-7 '60. (MIRA 1962)

1. Direktor Leningradskogo koksofornovogo zavoda.
(Leningrad--Coke-oven gas)

L 52135-65 EPT(c)/EWP(j)/EWT(E) Pc-4/Pr-4

ACCESSION NR: AP5015297

UR/0286/65/000/009/0068/0038

AUTHORS: Shorygina, N. V.; Pilyayeva, V. F.

TITLE: A method for obtaining formolites. Class 39, No. 170669

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 68

TOPIC TAGS: formolite, formaldehyde, inorganic acid, catalyst, anthracene, sulfuric acid, hydrochloric acid

ABSTRACT: This Author Certificate presents a method for obtaining formolites by condensing formaldehyde and a mixture based on anthracene, in the presence of an inorganic acid used as a catalyst. To simplify the production process and to diminish the amount of catalyst, a mixture of raw anthracene and anthracene oil is applied. This reaction may be conducted in the presence of sulfuric or hydrochloric acid.

ASSOCIATION: Nauchno-issledovatel'skiy institut plasticheskikh mass (Scientific Research Institute of Plastics)

SUBMITTED: 05Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 000

OTHER: 000

Card 1/1 mb

IGITOV, A.S.; KNORRE, A.G.; LEVIN, G.Z.; PILYAYEVA, V.I.

Lev Iakovlevich Pines and his contribution to neuromorphology.

Trudy Gos.nauch.-issl.psikhonevr.inst. 28:11-44 '62. (MIRA 15:12)

(PINES, LEV IAKOVLEVICH, 1895-1951) (NERVOUS SYSTEM)

L 22262-66

ACC NR: AR6005175

SOURCE CODE: UR/0058/65/000/009/A016/A018

AUTHORS: Ievodnichanskiy, G.; Mel'zatskiy, K.; Petrushka, Y.; Pilyayeva, Y.

TITLE: Photoelectric spectrometer 10

SOURCE: Ref. zh. Fizika, Abs. 9A148

REF. SOURCE: Tr. Komis. po spektroskopii. AN SSSR, t. 2, vyp. 1, 1964, 665-669

TOPIC TAGS: spectrometer, photoelectric method, spectral line, line intensit//KS-55 spectrometer

TRANSLATION: Apparatus has been developed, capable of recording the time variation of the intensities of two spectral lines arbitrarily selected from the spectrum obtained with a type-E478 Hilger spectrograph or a type KS-55 spectrograph, and of automatically recording the spectrum of a continuous source of radiation. Two entrance slits separate two arbitrary spectral lines. A system of light pipes guides the radiation flux from the slits to the cathodes of two photomultipliers. The slits can be moved with the aid of two micrometer screws. One of them is driven by a synchronous motor. The spectrum is automatically recorded by using a second synchronous motor. The apparatus can be attached to the spectrograph without any supplementary changes in their construction.

SUB CODE: 20

Cord 1/1 nat

PILYSHCHIKOV, A. I.

"On the Method for Determining of the Parameters of Ferromagnetic Resonance from Experimental Data," Zhur. eksper. i teor. fiz., 29, pp 798-807, 1957

Translation D 419421, page 87

OGLOBLIN, D.N., prof., doktor tekhn.nauk; NIKOL'SKIY, I.L., dotsent ;
PILYUCHENKO, G.Ye., dotsent

Reviewing the second volume of the encyclopedic manual "Mining
Engineering." Ugol' 35 no. 4:61-62 Ap '60. (MIRA 14:4)
(Mining engineering—Handbooks, manuals, etc.)

PILYUGIN, A.A., inzhener.

Feed chute for measuring liquid bituminous binding materials.

Kats. i izobr. predl. v stroi. no. 57:11-12 '53.

(MIRA 7:1)

(Volumetric apparatus) (Bitumen)

PILYUGIS

ARBUZOV, N.T., kand.tekhn.nauk; GROMOV, V.L., kand.tekhn.nauk; KURBATOV,
D.I., kand.tekhn.nauk; MOROZOV, I.V., kand.tekhn.nauk; PITYUGIS,
A.I., kand.tekhn.nauk; SHENKITSIS, A.A., kand.tekhn.nauk; SICHENETOV,
A.N., red.; KORSAK, Yu.Ye., red.; MATUSEVICH, S.M., tekhn.red.

[Manual of civil engineering] Spravochnik po grazhdanskomu stroitel'-
stvu. Izd. 3-e, perer. i dop. Kiev. Gos.izd-vo tekhn. lit-ry USSR.
Vol.2. 1958. 560 p. (MIRA 11:7)

(Civil engineering)

PILYUGIN, A. I.

"Analysis of Additional Sinking of Foundations Owing to Pressure on the Ground by Adjacent Foundations." Sub 19 May 47, Moscow Order of the Labor Red Banner Construction Engineering Inst imeni V. V. Kuybyshev

Dissertations presented for degrees in science and engineering in Moscow in 1947.

MO: Sum.No. 457, 18 Apr 55

1
ARBUZOV, N.T., kand.tekhn.nauk; GROMOV, V.L., kand.tekhn.nauk; GORSKIY, B.Z.,
kand.tekhn.nauk; KALISHCHUK, A.L., kand.tekhn.nauk; KUNITSKIY, L.P.,
kand.tekhn.nauk; KURBATOV, D.I., kand.tekhn.nauk; MOROZOV, N.V., kand.
tekhn.nauk; ~~PILYUGIN~~, A.I., kand.tekhn.nauk; PRIMAK, N.S., kand.tekhn.
nauk; SEMENTSOV, S.A., kand.tekhn.nauk; ULITSKIY, I.I., kand.tekhn.
nauk; KHUTORYANSKIY, M.S., kand.tekhn.nauk; SHEKRENTSIS, A.A., kand.
tekhn.nauk; PINSKIY, Ye.A., inzh.; KARSAK, Yu.Ye., red.; PATSALYUK,
P.M., tekhn.red.

[Civil engineering handbook] Spravochnik po grazhdanskomu stroitel'-
stvu. Izd. 3-e, perer. i dop. Kiev, Gos. izd-vo tekhn. lit-ry USSR
Vol. 1. 1958. 867 p. (MIRA 11:5)
(Civil engineering--Handbooks, manuals, etc.)

TSYTOVICH, N.A., prof.; VESELOV, V.A., dotsent, kand.tekhn.nauk; KUZ'MIN, P.G., dotsent, kand.tekhn.nauk; FERRONSKIY, V.I., kand.tekhn.nauk, assistant; PITYUGIN, A.I., kand.tekhn.nauk, assistant; LUGA, A.A., kand.tekhn.nauk, starshiy nauchnyy sotrudnik; SOKOLOV, N.M., kand.tekhn.nauk, starshiy nauchnyy sotrudnik; SAVINOV, O.A., doktor tekhn.nauk; KOSTERIN, B.V., kand.tekhn.nauk, assistant. Prinimali uchastiye: AKINSHIN, V.M.; MARTSENYUK, V.I., starshiy laborant. VASIL'YEV, B.D., prof., doktor tekhn.nauk, retsenzent; BEREZANTSEV, V.G., prof., doktor tekhn.nauk, retsenzent; LAGAR'KOV, N.I., inzh., nauchnyy red.; SMIRNOVA, A.P., red.izd-vn; NAUMOVA, G.D., tekhn.red.

[Foundation engineering] Osnovaniya i fundamenty. Pod red. N.A. Tsytoicha. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1959. 452 p. (MIRA 13:5)

1. Chlen-korrespondent AN SSSR (for Tsytoich). 2. Zaveduyushchiy laboratoriyey kafedry osnovaniy i fundamentov Moskovskogo inzhenerno-stroitel'nogo instituta imeni V.V.Kuybysheva (for Akinshin).
 3. Zaveduyushchiy kafedroy osnovaniy i fundamentov Leningradskogo instituta inzhenerov zheleznodorozhnogo transporta imeni akademika V.N.Obratsova (for Berezantsev).
- (Foundations) (Soil mechanics)

PILYUGIN, A.I.

Some results and features of tests made on settling loess
soils in a stability meter. Osn., fund.i mekh.grun. 4 no.2:11-
13 '62. (MIRA 15 8)

(Loess--Testing)

ARBUZOV, B.T., kand.tekhn.nauk; GROMOV, V.I., kand.tekhn.nauk; GORSKIY, B.Z., kand.tekhn.nauk; KALISHCHUK, A.L., kand.tekhn.nauk; KUNITSKIY, L.P., kand.tekhn.nauk; KURBATOV, D.I., kand.tekhn.nauk; MOROZOV, N.V., kand.tekhn.nauk; PILYUGIN, A.I., kand.tekhn.nauk; PRIMAK, N.S., kand.tekhn.nauk; SEMENTSOV, S.A., kand.tekhn.nauk; ULITSKIY, I.I., kand.tekhn.nauk; KHUTOBYANSKIY, M.S., kand.tekhn.nauk; SHERENTSI, A.A., kand.tekhn.nauk; PINSKIY, Ye.A., inzh.; KORSAK, Yu.Ye., red.; MATUSEVICH, S.M., tekhn.red.

[Manual on civil engineering] Spravochnik po grazhdanskomu stroitel'stvu. Izd.4., ispr. Kiev, Gos.izd-vo tekhn.lit-ry. Vol.1. 1959. 867 p. Vol.2. 1959. 560 p. (MIRA 12:8)
(Civil engineering)

IVANOV, I.T.; MONFRED, Yu. B ; Pilyugin, A.I.; SMRGYEV, D.D.;
SYPOCHUK, P.P.; IZRAILOVICH, N.Ye., inzhener, redaktor;
YEGOROVA, N.O., redaktor; TOKER, A.M., tekhnicheskiy
redaktor.

[Construction of dwellings and civil buildings in areas
of underground coal mining] Konstruktsii zhilykh i grash-
dhanskikh zdaniy v raionakh s podzemnoi razrabotkoi uгля.
Moskva, Gos.izd-vo lit-ry po stroit. i arkhitekture, 1955.
68 p. (MLRA 9:1)

(Building)

PILYUGIN, A.I.

Lateral pressure resulting from the sagging of loess soils.

Osn., fund. i mekh. grun. 3 no.1-10-12 '61.

(Loess)

(Soil mechanics)

PILYUGIN, Boris Alekseyevich; MATIS, T.I., red.izd-va; SHMAKOVA,
T.M., tekhn. red.

[Handbook for regulating the condition of the atmosphere
in mines and ventilating underground prospecting workings]
Posobie po kontroliu za sostoianiem rudnichnoi atmosfery
i provetrivaniu podzemnykh geologorazvedochnykh vyrabotok.
Moskva, Gosgeoltekhizdat, 1962. 93 p. (MIRA 16:5)
(Mine ventilation)

22(5)

SOV/13-59-0-11/16

AUTHOR: Pilyugin, B.A.

TITLE: For a Further Improvement in Labor Protection and in Safety Conditions at Geological-prospecting Works

PERIODICAL: Razvedka i okhrana nedr, 1959, Nr 6, pp 17 - 18 (USSR)

ABSTRACT: Over 50 million rubles were spent in 1958 for the improvement of sanitary and safety conditions in mines and other geological works. The author lists the measures taken to improve sanitary and safety conditions of members of different working parties and expeditions in distant places. Further mechanization of different mining operations considerably cut down the number of accidents. The introduction of improved drilling equipment alleviated the working conditions in mines. Drilling rigs ZIF-150CA with electromotors, ZIF-650CA with a D-35 Diesel motor and SBU-150 on the ZIS-150 truck were introduced. New types of drilling rigs are: UAE-300 for diamond

Card 1/2

SOV/111-1-6-10/16

For a Further Improvement in Labor Protection and in Safety Conditions at Geological-Prospecting Works

drilling of 200 m deep bore-holes; UVB-1 for vibration-percussive drilling of 15 m deep bore-holes and UVB-3 - for drilling 3 m deep bore-holes are now being planned. To alleviate the work on sinking the shafts, a pit sinking SMIA-1A aggregate and a lifting KSh-1 crane will be used. To increase the safety of works during the sinking of drive-pipes into the bore-holes, the IC-47A and IC-49A tools for screwing and unscrewing the drive-pipes and a self-centering BL-43 vise with hydraulic gear are now being mass produced. The new TBIOT-54 m dust catching equipment for mines will shortly be introduced. The author appeals to all concerned for stricter adherence to the established safety rules and working discipline.

ASSOCIATION: Ministerstvo geologii i okhrany prirodnykh resursov (the Ministry of Geology and Conservation of Mineral Resources of the USSR)

Card 2/2

KUTUKOV, A.I., red.; GARKALENKO, K.I., red.; GORBACHEV, I.V., red.; YERMAKOV, P.I., red.; OVSIANNIKOV, Yu.N., red.; PITYUGIN, B.A., red.; RODIONOV, I.S., red.; RODIONOV, A.N., red.; SEREBRIN, I.Ya., red.; GUSEV, M.S., red. izd-va.; PROZOROVSKAYA, V.L., tekhn. red.; SABITOV, A., tekhn. red.

[Uniform safety rules for geological surveying; compulsory for all ministries, economic councils, departments, organizations, and enterprises conducting geological studies] Edinye pravila bezopasnosti pri geologorazvedochnykh rabotakh; obiazatel'ny dlia vseh ministerstv, sovnarkhozov, vedomstv, organizatsii i predpriyatii, vedushchikh geologicheskie raboty. Moskva, Ugletekhizdat, 1958. 102 p. (MIRA 11:12

1. Russia (1923- U.S.S.R.) Komitet po nadzoru za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru.
(Geological surveys)

PILYUGIN, B.A.

"Avalanches and safety measures to be taken in geological prospecting"
by K. Tushinski. Reviewed by B.A. Pilyugin. Razved. i okh. nebr 24
no. 5:61-62 My '68. (MIRA 11:9)

1. Ministerstvo geologii i okhrany nebr SSSR.
(Avalanches)

AUTHOR: Pilyugin, B.A. 137-15-1-13/24

TITLE: K. Tushinskiy. Avalanches and Protection From Them at Geological Prospecting Operations (K. Tushinskiy. Laviny i zashchita ot nikh na geologorazvedochnykh rabotakh) Reviews and Bibliography (Rezheniye i bibliografiya).

PERIODICAL: Razvedka i Otkrytiya Nedr 1977, Nr 1, pp 61-6. (USSR).

ABSTRACT: A review is made of the above-mentioned book.

ASSOCIATION: Ministerstvo geologii i otkrytiya nedr SSSR (Ministry of Geology and Conservation of Mineral Resources of the USSR)

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SERGEYEV, A.A., red.; AMPILOGOV, I.M., red.; ASSONOV, V.A., red.; BABAYANTS, M.A., red.; BABOKIN, I.A., red.; BALAMUTOV, A.D., red.; BOGORODSKIY, N.N., red.; BOLONENKO, D.N., red.; BUCHNEV, V.K., red.; VAKHMLITSEV, G.S., red.; VORONKOV, A.K., red.; GARKALENKO, K.I., red.; GORBATOV, P.Ye., red.; GOLOVLEV, V.Ya., red.; DOKUCHAYEV, M.M., red.; DUBNOV, L.V., red.; YEVTSEYEV, A.D., red.; YEREMENKO, Ye.K., red.; ZENIN, N.I., red.; KRIVONOGOV, K.K., red.; KUPALOV-YAROPOLK, I.K., red.; MATSYUK, V.G., red.; NIKOLAYEV, S.I., red.; ONISHCHUK, K.N., red.; PETROV, K.P., red.; PITYUGIN, B.A., red.; PLATONOVA, A.A., red.; POLESIN, Ya.L., red.; POKROVSKIY, L.A., red.; POMETUN, D.Ye., red.; POLYUSHKIN, A.Kh., red.; REYKHNER, V.P., red.; SEDOV, N.A., red.; SIDORENKO, I.T., red.; FIDELEV, A.A., red.; CHAKHMAKHCHEV, A.G., red.; CHEMODUROV, M.Ya., red.; SHUMAKOV, A.A., red.; YAREMENKO, N.Ye., red.; PARTSEVSKIY, V.N., red.izd-va; ATTOPOVICH, M.K., tekhn.red.

[Standard safety regulations for blasting operations] Edinye pravila bezopasnosti pri vzryvnykh rabotakh. Izd.2. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1958. 318 p. (MIRA 13:1)

1. Russia (1923- U.S.S.R.) Komitet po nadzoru za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru. (Mining engineering--Safety measures)

PILYUGIN, B.A., inzh.

A useful collection of regulations ("Collected regulations, orders and instructions on labor safety for geological surveying organizations"). Bezop.truda v prom. 5:35-36 Mr '61. (MIRA 14:3)
(Geological surveys—Safety measures)

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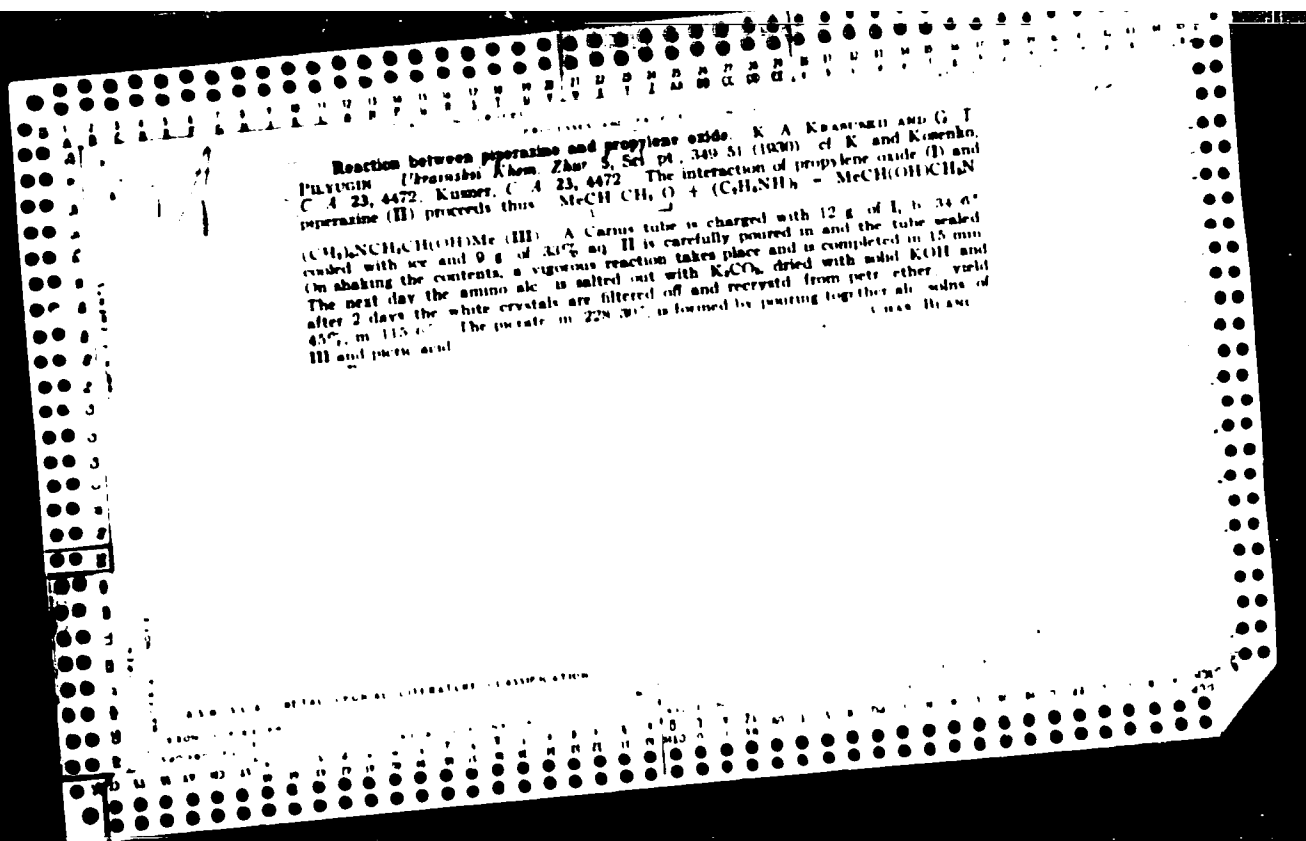
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Reaction between propylene oxide and diethylamine. K. A. KHARUMET AND G. T. PLYUGIN. *Ukrainski Khim. Zhur.* 3, 541 Pt. 135 (1960). The reaction between 1 mol of $\text{MeCH}_2\text{CH}_2\text{O}$ and 2 mols of Et_2NH in water at concn. of 33% 70% results in the formation of 65% of 3-diethylamino-2-propanol (B. Sm. 157.5-9; d_4^{20} 0.8077, d_4^{25} 0.8511). The HCl salt is prepd. by passing dry HCl into I in Et_2O and recrystg. from Me_2CO . The picrate is obtained by mixing I and picric acid in mol proportions in alc., m. 80°.

CHAS. BLANK

ALSO SEE METALLURGICAL LITERATURE CLASSIFICATION

Reactions of benzylamine and isobutylamine with propylene oxide. K. A. Kna
MUMBI AND G. T. PILLAYAS. *Transac. Amer. Chem. Soc.* 71: 237-241 (1949).
cond. 2, 342 C. A. 24, 3218. *Rec. 20, 2064 (1949). Condensation of benzylamine (I)
and propylene oxide (II). The reactions were carried out in sealed glass tubes one mist
contg. 11.0 g. of II, 0.45 g. and 10.7 g. of I (100% aq. soln. in 104.0 g. of I) 2. and
another contg. 5.8 g. of II and 10.7 g. of I (100% aq. soln. in 104.0 g. of I) 2. After standing about 15 min. the
mixts. become spontaneously heated, forming 2 layers. The reaction may be com-
pleted at room temp. but heating 3 hrs. at 100° gives a better yield. The lower layer
dried and redistd. gives 11 g. (62% yield) of 1-benzylamino-2-propanol (3, 142.5-143.5°
d. 1.0194 at 15°/4°) producing a HCl salt and a picrate in 120.8°. Condensation of
isobutylamine (III) and II. The procedure is as described above. The mist is com-
posed of 12 g. of II and 9 g. of III, 0.90% (in 100% aq. soln. in 104.0 g. of I) 2. The whole is heated
1-10 hrs. at 100°. The upper layer was dried with KOH and redistd. The fraction
100-105° (100% aq. soln. in 104.0 g. of I) 2. The upper layer was dried with KOH and redistd. The fraction
100-105° (100% aq. soln. in 104.0 g. of I) 2. In order to find out the influence of H₂O on the speed of condensation
of a oxides and amines in forming amino alcs. the tests were made with and without
the presence of H₂O. H₂O accelerates the reaction and increases the yield from 50
to 140.*



1ST AND 2ND EDITIONS		PROCESSING AND PROPERTIES INDEX		1ST AND 2ND EDITIONS	
BC				3-II-1	
Fertilization of anthracene with simultaneous separation of highly concentrated carbazole. G. T. Dikhanov (J. Appl. Chem., Russia, 1955, 8, 1088-1095). The fraction b.p. 180-170° of crude $C_{12}H_8N$ bases at a low temp. gives 4-65-65% of anthracene, with simultaneous separation of highly conc. carbazole. Cu. Ans.					
ASD-SCA METALLURGICAL LITERATURE CLASSIFICATION					
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Formation of allyl chloride from allyl alcohol and hydrochloric acid. (G. I. P. Tolpin, *Thesis Kham Zbor. & Tech. Wiss. Teil. 213-10 (1932)*). By heating 1 mol. of $C_3H_7OH + 2$ mol. HCl (d 1.19) in a fused tube at 100° for 15 hrs. C_3H_7Cl , b. $400-410^\circ$, was prepd. Yield, 78%. Change of proportions or temp. lowers the yield. A reversible reaction is suggested. J. G. TOLPIN

[illegible]

ROGOVIK, M.Y.; CHERNYKH, I.R.; ROZUM, Y.S.; PITYUGIN, G.T.

Structure and absorption spectra of N-aryl quinolinium salts in
the ultraviolet. Zhur. ob. khim. 34, no. 11: 1320-1326, 1961.

MPA 1961

1. Chernovitskiy gosudarstvennyy universitet i Institut organicheskoy
khimii AN UkrSSR.